

I. AMENDMENTS TO THE CLAIMS

Please enter the following claims into the file of this Application. A complete listing of all claims under examination in the Application is provided below along with each claim's status, which is indicated in a parenthetical expression. No amendments are requested, and claims 1 and 5 are canceled.

1. (Canceled)

2. (Previously Presented) A system for *in situ* x-ray study of electrode component performance in a rechargeable electrochemical energy storage cell comprising a combination of opposed polarity electrode members and interposed separator member with electrolyte disposed within a hermetic enclosure having an integral x-ray transmissive window member situated to allow incidence therethrough of such radiation upon an electrode member site under study

characterized in that the system comprises:

- a) a body providing a cylinder for receiving therein components of said cell member combination;
- b) sealing means surrounding the proximal end of said cylinder;
- c) a base plate providing a radiation access opening situated adjacent said cylinder proximal end and aligned concentrically therewith and within the circumference of said sealing means;
- d) said window member being situated intermediate said base plate and said sealing means and extending peripherally beyond said sealing means;
- e) Means for removably affixing said base plate to said body and compressing said sealing means against said window to form an hermetic seal therewith;

f) adjustable means situated at the distal end of said cylinder for applying compressive force urging said combination of cell components within said cylinder toward contact with said window member; and

g) means for hermetically sealing said cylinder distal end.

3. (Original) A system according to claim 2 wherein:

a) said body, said base plate, and said electrode member under study are in electrical continuity;

b) said adjustable means comprises an electrically conductive piston member axially displaceable within said cylinder and in electrical continuity with the electrode member of opposed polarity to said electrode member under study; and

c) said cylinder distal end sealing means comprises an electrically insulating ring member fitted to the annular space between said piston member and said cylinder distal end and compressible therein to mechanically fix the axial displacement of said piston member and effect said distal end hermetic seal while electrically insulating said piston from said body.

4. (Original) A system according to claim 3 wherein means situated within the annular space between said piston member and the interior wall of said cylinder electrically insulates said body from cell member components in electrical continuity with said piston.

5. (canceled)